Journal club in a teaching hospital of East Delhi

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Introduction: Journal Club helps to keep up with the vast literature and improves critical appraisal skills. As participation in journal clubs was decreasing a cross sectional survey to know the attitude towards journal club was conducted.

Materials and Methods: A questionnaire comprising of 16 questions was mailed to the faculty and post graduate students. Each most desirable response was scored 4 and least desirable scored 0.

Results: 47% faculty and 52% students participated. Majority were in favor of journal clubs being held. 90% agreed that journal clubs increase self confidence in delivering talks. 92% wanted both the faculty and students to present journal club, the duration of which should not be more than one hour and not more than 3 articles are presented. Majority felt department work load did not hinder journal club participation. Giving copies of articles being presented before hand, elaboration of materials and methods and increased involvement of faculty were suggested. Workshop emphasizing role of journal club has lead to an apparent increase in attendance.

Conclusions: Faculty and residents had a positive attitude towards journal club. Possibly decreased perceived importance of journal club and lack of push by motivated faculty led to decreased participation.

Keywords: Journal club, faculty, students, motivation, teaching hospital, review

INTRODUCTION

There is an explosion of scientific knowledge and its fast dissemination via the net creates an overabundance of relevant medical literature. A Journal Club is a form of continuing medical education that helps to keep up with the vast literature being published these days. It helps in the understanding of the principles of evidence based medicine and improves critical appraisal skills. It teaches residents how to read an article and determine which have reliable and valid findings. Technology participants using Pato et al. (2013), model can develop strong critical appraisal skills and methods for organizing the information. First recorded Journal Club was in Montreal in 1875 organized by Sir William Osler at McGill University. At our institute Journal Clubs are being held since 1984 when the post graduate teaching began. We found that the attendance in the journal clubs was decreasing in some of the departments, possibly due to lack of interest. We decided to formally enquire about the attitude of faculty and residents towards Journal Club with the aim to know if the decrease in attendance was due to a negative attitude.

MATERIALS AND METHODS

A cross sectional questionnaire based survey was conducted among the faculty and residents of one of the medical colleges.

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A self-administered anonymous questionnaire based on Likert Scale was emailed to the faculty and postgraduate students for assessing the attitude of the respondents towards holding of Journal Club sessions. The questionnaire comprised of 16 questions. Eight questions were framed in a positive format, meaning that the most desirable response was ‘strongly agree’ and least desirable was ‘strongly disagree’. Remaining eight questions were framed in negative sentences, thus reversing the response category. The positive and negative format was utilized to ascertain the reliability of responses. Each most desirable response was given a score of 4 and the least desirable response was given a score of 0. Thus the range of total score was 0 to 64 with 64 being the favorable score. Suggestions and comments were asked for.

**RESULTS**

Seventy five respondents participated (48.70%) in the study. Of these 52 were faculty members (professor, reader, lecturer and senior residents) and 23 were post graduate students. A total of 110 teaching faculty and 44 post graduate students were on the rolls of our college.

On exploratory analysis, one of the questions was found to have ambiguity about the response hence it was deleted from total score calculation. Thus for the final 15 questions that were analyzed the total score ranged from 0 to 60. The difference in mean scores of faculty and students was not statistically significant. Thereby suggesting that the students and faculty had similar attitude towards journal club (Table 1).

Looking at individual questions, we found that every 3 out of 4 respondents were in favor of a journal club being held because it helped in enhancement of knowledge and increasing awareness about current research. More than 89% of responding students and faculty agreed that journal clubs increase self confidence in delivering talks. However 30% of the student and 17% of faculty disagreed with the statement that journal club motivated them for self learning. Similarly 45% of the responding students and teachers did not believe that journal club sessions help evaluation of research articles (Table 2).

Greater than 91% of the respondents wanted both the faculty and students to present journal clubs the duration of which should not be more than one hour and not more than 3 articles be presented. Majority of respondents did not think that the work load in the department did not leave them with enough time to prepare for journal club presentation. Giving copies of articles being presented before hand, elaboration of material and methods and increased involvement of faculty were suggested.

**DISCUSSION**

Journal clubs are held with the primary objective of familiarizing students with current research, improving their analytical skills and confidence in presentation (Akhund and Kadir, 2006; Alquique, 1998). We found that majority who responded agreed that Journal clubs helped in enhancement of knowledge and create awareness about current research. Deenadayalan et al. (2008),

### Table 1. Composite total score of respondents

<table>
<thead>
<tr>
<th>Category</th>
<th>Respondents</th>
<th>Mean</th>
<th>S.E.</th>
<th>Median</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>23</td>
<td>44.1</td>
<td>1.21</td>
<td>45</td>
<td>25</td>
<td>51</td>
</tr>
<tr>
<td>Faculty</td>
<td>52</td>
<td>45.8</td>
<td>0.75</td>
<td>46</td>
<td>34</td>
<td>59</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>45.29</td>
<td>0.64</td>
<td>45</td>
<td>25</td>
<td>59</td>
</tr>
</tbody>
</table>

### Table 2. Attitude of the respondents towards some aspects of Journal Club presentation

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Student (n=23)</th>
<th>Faculty (n=52)</th>
<th>Total (n=75)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JC should be held</td>
<td>17 (73.9)</td>
<td>41 (78.9)</td>
<td>58 (77.4)</td>
</tr>
<tr>
<td>JC helps knowledge enhancement</td>
<td>19 (82.6)</td>
<td>44 (84.6)</td>
<td>53 (70.7)</td>
</tr>
<tr>
<td>Creates awareness about research</td>
<td>20 (86.9)</td>
<td>49 (94.2)</td>
<td>69 (92.0)</td>
</tr>
<tr>
<td>Creates awareness about new techniques</td>
<td>6 (26.1)</td>
<td>20 (38.5)</td>
<td>26 (34.6)</td>
</tr>
<tr>
<td>Improves self confidence about delivering talks</td>
<td>18 (78.2)</td>
<td>49 (94.3)</td>
<td>67 (89.3)</td>
</tr>
<tr>
<td>Motivates for self learning</td>
<td>16 (69.5)</td>
<td>43 (82.7)</td>
<td>59 (78.7)</td>
</tr>
<tr>
<td>Helps critical evaluation of research articles</td>
<td>12 (52.2)</td>
<td>29 (55.8)</td>
<td>41 (54.7)</td>
</tr>
<tr>
<td>Faculty should take journal club</td>
<td>21 (91.3)</td>
<td>48 (92.3)</td>
<td>69 (92.0)</td>
</tr>
<tr>
<td>Duration should not be more than one hour</td>
<td>22 (95.7)</td>
<td>49 (94.2)</td>
<td>71 (94.7)</td>
</tr>
<tr>
<td>Not more than 3 articles should be presented</td>
<td>21 (91.3)</td>
<td>50 (96.2)</td>
<td>71 (94.7)</td>
</tr>
<tr>
<td>Departmental work load is not a reason</td>
<td>19 (82.6)</td>
<td>43 (82.7)</td>
<td>62 (82.7)</td>
</tr>
</tbody>
</table>

JC = journal club
found over 80% papers reported that journal club intervention was effective in improving knowledge and critical appraisal skills. In some departments (clinical) of our college the emphasis is more on critical evaluation and in others more on enhancement of knowledge. However, many a time there has been debates about various aspects of journal clubs for example whether it should be presented by faculty or student or both. What should be the frequency, number of articles to be presented etc? We found that the students and teachers favor journal club as a regular academic activity. Usually original articles are discussed. In some departments only single article is discussed for 1-2 hours. In other departments 2-4 articles are discussed including review articles. Opinion was divided on whether review articles should be discussed or not. Alguire (1998), found that only original research articles were reviewed in 50% of the journal clubs in eastern internal medicine training programs. Interestingly Alguire (1998), also found that although the strategy of restricting journal club articles to original research was associated with longevity, it was associated with the lowest resident attendance rates. The faculty of our college wanted that newer concepts and techniques related articles should be taken. Students wanted statistical tools and designs should also be discussed.

Moberg-Wolff and Kosasih (1995), found that poor faculty attendance was a chief concern. In majority of the departments at our institution the faculty attendance was poor. Faculty presence improves attendance in journal clubs. This was found to hold true in our department. Successful journal clubs are ones with regular meetings and clear aims (Deenadayalan et al., 2008). Successful journal clubs use structured review checklist with explicit written learning objectives (Lee et al., 2005). Hartzell et al. (2009), found that many residents at their institution were dissatisfied with the current format of journal club. A resident run model of journal club was developed based on Adult Learning Theory (Hartzell et al., 2009), the residents preferred the new model compared to the old model. Deenadayalan et al. (2008), found that no paper reported on the translation of evidence from journal club into clinical practice. Alguire (1998), found that the major goal for most clubs is to teach critical appraisal skills. Clubs with high attendance and longevity are characterized by mandatory attendance, availability of food, and perceived importance by the program director. Faculty attendance is not mandatory though post graduate students attendance is mandatory at our institute. Many journal clubs begin with a flurry of activity, languish in 1 or 2 years, and are renewed again with a new generation of residents. Virtual journal club (VJC) for internal medicine residents and faculty was developed by Kwar et al. (2012), to increase journal club participation by overcoming time and geographic barriers to attendance. VJC received an initial enthusiastic response. However, after 3 months, enthusiasm faded, and indicators of participation decreased. Common reasons for discontinuing journal clubs appears to be lack of time, inadequate preparation, and lack of goals and interest (Heiligman and Wollitzer, 1987). In our study majority of respondents did not think that work load in the department deprived them of sufficient time to prepare for journal club presentation. Journal club participation was not felt to significantly alter the amount of reading residents did (Moberg-Wolff and Kosasih, 1995). Schwartz et al. (2007), found that guidelines have dramatically improved the enthusiasm for quality of, and attendance at their journal clubs, which have now been running continuously for more than 15 years. Sidorov (1995), defined successful journal clubs as those with longevity (at least 2 years) and high levels of resident participation (at least 50% attendance). Attendance is mandatory only for post graduate students in our college. In Pakistan a survey by Akhund and Kadir (2006), for a successful journal club, the respondents recommended improved faculty participation and incorporating a structured checklist for article review. A structured Journal Club helped in the creation, dissemination and application of medical knowledge (Lao et al., 2014). We found that the attendance in journal clubs has improved (apparently as no formal study has been conducted) considerably after the establishment of Medical Education Unit (the survey was conducted before) at our institution in which faculty workshops are being held and importance of journal clubs and the role of faculty attendance and faculty moderator emphasized. From the responses the fact which emerges is that in any educational activity howsoever beneficial, it is bound to come down for lack of supervision and the interest and push of at least one senior faculty member who is willing /interested to continue the practice / tradition. Possibly the participation in Journal Club was decreasing due to low faculty participation and decreased perceived importance of Journal Club.

Limitation of our study: Self administered questionnaire. Interview based questionnaire may possibly have removed some ambiguity in responses.

CONCLUSION

Our survey showed that the faculty and residents had a positive attitude towards journal club and favored Journal Club as a regular academic activity. They wanted both the faculty and residents to present journals. The duration of journal Club should not be more than one hour and not more than 3 articles should be presented. Majority of respondents did not think that work load in the department hindered journal club presentation. Possibly decreased perceived importance of journal club and lack of push by motivated faculty led to decreased participation.
FUTURE WORK AND RECOMMENDATION

Periodical interview based surveys to know the attitude of journal Club participants. Creating awareness of the significance of Journal clubs as a teaching and learning tool. Mandatory attendance would improve journal club participation by faculty and residents thus contributing to the success and longevity of journal club.

REFERENCES


Schwartz MD, Dowell D, Aperi J, Kalet AL (2007). Improving journal club presentations or, I can present that paper in under 10 minutes. Evidence-based medicine. 12: 66-68. doi:10.1136/ebm.12.3.66-a


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